

## CLAIMS

We claim:

1. A system, comprising:
  - at least one processor for execution of a specified valuation method;
  - 5 at least one database associated with the processor; and
  - a financial account, the account having term and having a plurality of time periods associated therewith, with the plurality of time periods cumulatively less than or equal to the specified term, and the account having a premium deposited therein;

wherein the specified valuation method executed by the at least one processor uses the  
10 relationship

$$E_t = (P - (t - 1)A)i_t + \sum_{n=2}^t Ai_n$$

provided that  $tA \leq P$ , and where P is the premium, t is the number corresponding to the number of one of the plurality of time periods, A is an amount less than P, and  $i_t$  is the interest rate for the time period designated as t.

- 15 2. The system of claim 1, further comprising at least one input device operatively connected to at the at least one processor.

3. The system of claim 1, further comprising at least one output device operatively connected to the at least one processor.

4. The system of claim 1, further comprising:  
20 an internal network operatively connected to the at least one processor.

5. The system of claim 1, further comprising:  
an external network operatively connected to the at least one processor.

6. The system of claim 1, wherein the at least one database contains data about the account, including the amount of the premium, the amount A, the term of the account, and the length of the time periods.

7. A method for financial account valuation, the method comprising the steps of:  
5 establishing an account, the account having a specified term and having a plurality of time periods associated therewith, with the plurality of time periods cumulatively less than or equal to the specified term;

establishing an interest rate for each of the plurality of time periods;

depositing a least one premium into the account;

10 calculating earnings at a time corresponding to one of the plurality of time periods,  $E_t$ , according to the relationship

$$E_t = (P - (t - 1)A)i_t + \sum_{n=2}^t Ai_n$$

provided that  $tA \leq P$ , and where P is the premium, t is the number corresponding to the number of one of the plurality of time periods, A is amount less than P, and  $i_t$  is the interest rate for  
15 the time period designated as t.

8. The method of claim 7, further comprising the step of:  
determining A as a percent of the premium P.

9. The method of claim 7, further comprising the step of:  
determining A as a fixed, monetary amount.

20 10. The method of claim 7, wherein the term of the account is equal to the cumulative time for the plurality of time periods such that earnings are calculated according to the calculating step throughout the term of the account.

11. The method of claim 7, wherein the interest rates for each of the plurality of time periods reflects then-current market rates.

12. The method of claim 7, wherein the interest rates for each of the plurality of time periods reflects the earnings on investments made with the account.

13. A method for financial account valuation, the method comprising the steps of:  
establishing an account, the account having term and having a first and second time  
5 period, wherein the sum of the first and second time periods is less than or equal to the term  
of the account;

depositing a premium P into the account and establishing an amount A less than the premium;

establishing a first interest rate,  $i_1$ , for the first time period;

10 determining earnings for the first time period as  $E_1 = Pi_1$ ;

establishing a second interest rate,  $i_2$ , for the second time period; and

determining earnings for the second time period as  $E_2 = Ai_2 + (P-A)i_1$ .

14. The method of claim 13, wherein the account further comprises a third time period, and wherein the sum of the first, second, and third time periods is less than or equal to  
15 the term of the account, the method further comprising the steps of:

establishing a third interest rate,  $i_3$ , for the third time period; and

determining earnings for the third time period as  $E_3 = Ai_3 + Ai_2 + (P-2A)i_1$ .

15. The method of claim 13, wherein at least one of the first or second interest rates reflects a then-current market rate.

20 16. The method of claim 13, wherein at least one of the first or second interest rates reflects then-current earnings made with the account.

17. A method for financial account valuation, the method comprising the steps of:

(a) establishing an account, the account having a specified term and having a plurality of time periods associated therewith, with the plurality of time periods cumulatively  
25 less than or equal to the specified term;

- (b) depositing a premium P in the account;
  - (c) specifying an amount A less than the premium;
  - (d) establishing an interest rate for the first of the plurality of time periods;
  - (e) determining earnings for the account at the conclusion of the first of the
- 5 plurality of time periods as  $E_1 = Pi_1$ , where  $i_1$  is the interest rate for the first of the plurality of time periods, and P is the premium;
- (f) establishing an interest rate for the next of the plurality of time periods;
  - (g) determining earnings for the next of the plurality of time periods,  $E_t$ , using the relationship

10 
$$E_t = (P - (t - 1)A)i_1 + \sum_{n=2}^t Ai_n$$

where t designated the number of the next time period, and  $i_n$  is the interest rate for the time period n; and

- 18. The method and claim 17, further comprising the step of:
  - (h) repeating steps (f) and (g) until  $tA > P$ .
- 15 19. The method of claim 18, further comprising the step of:
  - (i) establishing earnings for the remainder of the term of the account using a fixed interest rate.
- 20 20. The method of claim 18, further comprising the step of:
  - (i) establishing earnings for the remainder of the term of the account by repeating steps (f), (g), and (h).
- 21. The method of claim 18, further comprising the step of:
  - (i) establishing earnings for the remainder of the term of the account using an earnings method from the group consisting of a portfolio method and a new money method.
- 22. A method for financial account valuation, the method comprising the steps of:

(a) establishing an account the account having a specified term and having a plurality of time periods associated therewith, with the plurality of time periods cumulatively less than or equal to the specified term;

(b) depositing a premium P in the account;

5 (c) specifying an amount A less than the premium;

(d) establishing a plurality of funds for the account, the total number of funds, t, equal to P/A;

(e) placing premium P in the first of the plurality of funds;

(f) establishing a first interest rate,  $i_1$ , for the first of the plurality of time periods;

10 (g) determining earnings for the first of the plurality of time periods by the relationship  $E_1 = F_1 i_1$ , where  $F_1$  is the first of the plurality of funds;

(h) establishing an interest rate for the next of the plurality of time periods;

(i) moving an amount A from  $F_1$  to the fund for that particular next time period,  $F_t$ ; and

15 (j) determining earnings for the next of the plurality of time periods by the relationship

$$E_t = \sum_{n=1}^t F_n i_n$$

where  $F_n$  is the fund for time period  $n$  and  $i_n$  is the interest rate for time period  $n$ .

23. The method of claim 22, further comprising the step of:

20 (k) repeating steps (h), (i), and (j) until  $tA > P$ .

24. A system, comprising:

at least one processor for execution of a valuation method according to the method of claims 7, 13, 17, or 22.